

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: NilsBull@aol.com
Subject: [6983] "QRP is too hard for beginner" my....!"
Message-ID: <961222213916_1255738189@emout13.mail.aol.com>

When I first got my licencia many years back (damn near 25 by now, I think), I had a DX60 tx and the swl version of the SB series receiver. Many were the times that I would discover at the end of a QSO that I'd been talking with someone while the tx was in the "tune" mode or with the drive alla way down. Now, yes, this was in Puerto Rico and, yes, PR can be a rare spot for novice dx, especially back in 1969 with a xtal-controlled transmitter.

Furtherless, when I got back to the States, I hooked up my trusty PM2 to a 4BTV vertical what was planted in the back yard and amazed the hell out of myself having QSO after QSO late on winter nights all around the country. And yes, it was a new radio experience for me, and, yes, all that thrill +c stuff does have something to do with it.

But QRP is NOT too hard for beginners. I don't know where this crap comes from. To me, the joy of knowing that a couple transistors (or an underdriven boob) can still carry a conversation (and I'm talking beyond the phatic here, gang) over distances in hundreds of miles is MORE exciting than being able to just gibber away like I do here most of the time.

So there! Bleah! Nya-nya-nya--nya-nya! Now where's my Altoids tin? It's got my meds in it, dammit, and I have to find 'em. Not a day can I go without my Falsifycin! Best damn time-release placebo I've seen. Swear by it. Yep. They give me two every night right after pudding and I sleep like a hibernatin' gerbil in the bag of moldy socks.

73
Nils
WB8IJN +c

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Michael D Wyman <Michael_D_Wyman@ccm.ch.intel.com>
Subject: [7014] 18HT HY Tower, I have one . . .

Hi there,

I have an 18HT, as a matter of fact I have 2 of them. If you want a more detailed debrief of their performance please drop me a line at Michael_d_Wyman@ccm.ch.intel.com

72 de Mike W1DRY

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Bill Acito 23-Dec-1996 0848 <acito@asdg.ENET.dec.com>
Subject: [7000] 30M is getting interesting
Message-ID: <9612231401.AA01916@us1rmc.bb.dec.com>

In between shopping et al, I finally finished my souped up 30-40. Has Dave's MMIC mod, the RIT, some stuff from "QRP Power"'s SW-40 article, and a KC2. I mod'd the cap to give over 50Khz of tuning, and put in a 10 turn pot for the tuning dial. I also wanted a little more meat in the front end, so I installed a Ten Tec broad band RF amp kit (15dB) in the receive line, before the RF Gain pot so I can bring up the gain to a point just before it saturates the 602. The entire rig is put into a nice Ten Tec Constructo case with front bail.

First QSO, at 950mw, was WA0USA in FL, a 459 on my Gap Titan.

I also worked the EM1 in Antartica on 30m QRO Thursday night. Couldn't hear me QRP, but someone else from 2-land worked him QRP.

Good time to get a 38. :-)

b

. - I own my own words -
Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

W1PA qrp-ne qrp-l adv-rs arc1 norcal amsat-na arrl-life

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: aulllj@future.atlcom.net (louis j aull)
Subject: [7006] Airlines: without carry on.

Message-ID: <9612231557.AA18736@future.atlcom.net>

At Wal-Mart and other discounters, they are making lunch boxes for kids that are soft sided and just the right size for my TAC-1 and MFJ tuner. These then go into the luggage. The 40M dipole, some parachute cord, and 50' of feeder coax go into a cheap kids book bag and then into the luggage. In addition, a very light switching supply, paddle and headset are packed into the book bag as well. The big question is always weight, keep it light! I wind up at about 5 lbs total with deluxe gear. Do carry your license, I've been asked on domestic flights.

Which brings to mind my special dislike for carry on luggage. The salesmen I see have homed in on a new "Orca" class suit bag that can fill the complete overhead compartment of one side of first class by itself! Soft or not, these things can result in injury if the owner is not sufficiently skilled in the extrication and guidance of these kick boxer targets with handles. What is more fun is when they are trying to get everyone to sit down so they can take off, but people are wandering forward from the back of the plane with some very large bag, opening all the overhead compartments to make sure that there isn't some small crevasse they can jam it into, usually on my sports coat or computer. Worse, someone has already set the trigger by jamming too much in some compartment, the person from the back of the plane trips the release, and like a claymore mine... Well I don't like to think about it. I think of "Home Alone" and similar hazards of air travel. Perhaps this is more fodder for the NTSB in their quest for the unexplainable. Just check the bags.

Many thanks and enjoy, 72/73 AE4JA , Lou Aull, Atlanta

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: rhigh@primenet.com (Roger Hightower)
Subject: [7028] ARRL SS pin
Message-ID: <199612232332.QAA04402@primenet.com>

Just rec'd the pin I earned/bought for the '96 SS CW test. Earliest I've ever gotten one. Too bad they can't see their way clear to put QRP on it.

72/73 de Roger N7KT (Ex-AA7QY) Mesa, AZ Grid DM43cj

NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Joe Gervais <vole@primenet.com>
Subject: [6982] Connector Losses
Message-ID: <199612230211.TAA22253@primenet.com>

Howdy All,

Just to add another data point to the topic of RF connector losses, in the latest Aerials column (Jan. issue of Worldradio) the author states that in a laboratory setup he hooked up 20 UHF connectors in a row.

Measured loss? At 28MHz, less than 1dB.

Ho Ho Ho de KC7NEV,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: SYDV00A@prodigy.com (FLOYD SMITHBERG)
Subject: [7024] Far Circuits phone nr?
Message-ID: <199612232144.QAA15636@mime4.prodigy.com>

Just tried to call Far Circuits 708-836-9148 per their Aug 95 order form. Operator tells me that number is no longer in service. Anybody know if they have a new number?

Floyd NQ7X Phoenix ScQRPion dm33uq

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996

From: Jim Dolson <dolsonj@ix.netcom.com>
Subject: [7017] For Sale: Unbuilt St. Louis Tuner kit
Message-ID: <32BEDE2C.5CC9@ix.netcom.com>

Why do I keep buying kits? It seems like I only have time to finish half of them!

Something has to go, how about an unbuilt St. Louis Tuner kit?

Asking \$115 plus a couple bucks for shipping.

73,
Jim
WB8ZBD
dolsonj@ix.netcom.com
616-787-7078 days
616-748-1671 evenings & weekends

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: "Warren E. Lewis" <saswel@unx.sas.com>
Subject: [7004] Happy Holidays and Farewell
Message-ID: <199612231520.AA07629@cardamom.unx.sas.com>

Happy Holidays to all of the QRP-L members. Thank you all for the wonderful QRP information and support over the past 3 years. I will miss getting my daily QRP-L fix, but, look forward to meeting more of you on the air next year. Look for me on the QRP calling frequencies!!

cheers - Warren (AD4ZE) ad4ze@amsat.org

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Paul Ridley_ <pridley@swcp.com>
Subject: [7013] Hi-Tower antenna
Message-ID: <01BBF0C1.2AE92F20@ppp120.swcp.com>

Anybody out there using a Hy-Gain Model 18-HT "Hy-Tower" vertical ?
I have a chance to pick one up and have some questions about it.
Paul...N5PR....

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Bill Myers <bmyers@destin.nfds.net>
Subject: [6995] HW-7/8/9 Info and Ramblings
Message-ID: <1.5.4.16.19961223064152.1ed72f56@destin.nfds.net>

Hi All,

Nice to see Nils back. Heard a lot about him, though I've never met him. Certainly adds a different perspective to QRP'ing... BTW Nils, tell your wife the Rainbow Tuner disarms the 38 Special so it will be safe and she'll probably let you have one. My wife let me get 2, so I can have a pair of "safe 38's".

I'm still looking for any information on the HW-7/8/9's. My last request did produce references to a few older publications which I am looking for, but little else. The original Hot Water Handbook is really hard to find so far. I do have the HW-8 Handbook, it has some good info. I plan to add a page on my homepage exclusively for the HW-7/8/9 series with information and modifications.

I did receive a number of requests for passing the info I receive on to other HW-7/8 owners. To those, I will as I get it. Maybe there is enough interest to start a HW-7/8/9 reflector?????

And I have a request!!!!!!!!!!!!!! I have seen a number of questions about the HW-8 lately, could the answers be cc'd to the list for all the other HW-8 owners??????????????? P L E A S E !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

On the other hand, I recently received, FREE, about 2 dozen copies of CQ magazine from the 1980. Lots of interesting articles on QRP operations and equipment, there are a couple of mostly QRP issues. Wish the prices for the gear was still that cheap!!!

Speaking of CHEAP, lookit all the gear coming available for \$25.00 + \$3.00 S/H. Ain't QRP'ing GREAT, and inexpensive.....?????????????

72/73 and Merry Christmas to ALL

--

Bill Myers KK4KF Grid - EM60rk
FISTS#2390 QRP-L#755 ARCI#9282 scQRP#42 CQC#386
Snail Mail P. O. Box 178 Shalimar, FL 32579
e-mail <bmyers@destin.nfds.net>
homepage <http://destin.nfds.net/~bmyers/>
 (Reptiles/Emergency Services/Amateur Radio)
CHECK OUT THE FISTS INTERNATIONAL CW CLUB U. S. HOMEPAGE
<http://n9nvv.qrp.com/~fists> (That's N 9 N V V)

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Byron8LCZ@aol.com
Subject: [7030] Kris Merschrod
Message-ID: <961223184411_1188749327@emout08.mail.aol.com>

Hi Gang,

Did you see Kris Merschrod OA4/KA20IG on the evening news tonite. He was held captive in Lima Peru and just released. CBS had quite a lengthy interview with him on the 6:30 pm news. It will probably be on again later tonite

Guess that explains why he hasnt been on QRP lately.

72, Byron WA8LCZ

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: NilsBull@aol.com
Subject: [6984] Like, dude, am I like missing like something here?
Message-ID: <961222213928_1888204493@emout16.mail.aol.com>

Oh, boy! A chance to complain about something! I can hardly wait!

Whew. Glad I got that over with. So here's the deal: I noticed that there's a lot of talk about the 38 Special (my wife hates guns... she gets nervous about the cap-n-ball in the shack... she'll never let me get a radio with a gun-soundin' name) and read just a second ago about it being in QRPP. Ok, sez I, let's check. My last QRPP is Vol 4, nr 3, Sept 1996. Now the mail tag says I'm good until June 98. (Did I really plan that far in advance? Better get my meds checked!)

Not that I need more radios, mind you. I'm just asking. And by the way, if I'd known that I was gonna get so many howdy-welcome-backs, I'd have held off for a while and tried to get some Hollywood type to get me a real sweet deal in some movie about small radios in mint tins... Hmmm.... Let's see... A Cuban refugee... No, a guy who survived Stalin's gulag goes to Argentina to live... he sees an old radio in a pawn shop and then these guys from California show up and then... L. Ron Hubbard and John Travolta.... them crazy hippies.... Che Guevarra... the guy who owns the IAMS cat food company... working alone from the glassy eyed troll.... mints.... just as the aliens from.... beautiful women in minimalist.... Elvis...and Nixon...

Yeah, that's the ticket.

73
Nils
WB8IJN +c

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [7022] Looking for Vert.parts...
Message-ID: <v02140b01aee4a4b4fcc4@[198.60.91.132]>

I'm looking for a multiband verticle to use as starting point for some antenna playing... Want to try to make a verticle functionally like an R7 (1/2wv vert) or a Gap for 40m and up

Anybody have an old verticle they'd be willing to sell cheap ? Don't forget, It highly unlikely that I'll pick it up, so although I will pay the shipping, you'd need to be willing to ship it....

Also any comments, suggestions, ridicule, etc are solicited on this project.

TNX Niel

Merry Christmas y'all

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Niel Skousen: Sr.Eng, SCIENTECH.SPG/CFG nskousen@scientech.com
208.525.3742, FAX 529.4721 Idaho Falls ID WA7SSA QRP-L.119
-Z-----DN33wm--- . . . -

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [7023] Motorola Question (Non-QRP, Sorry)
Message-ID: <19961223.163150.4679.1.wb2vuo@juno.com>

I just aquire a Motorola MAXAR, a 10 Meter front-mount mobile. The previous owner thinks that it is a "10-Watt" rig, but doesn't know. It has a 15 Amp fuse in line, so I feel it's more like an 80 Watt rig.

The model # is D31 TRA 1300 AK, and it it tagged "33.02 MHz")

Any Motorola techs out there that can translate this for me? I plan to put it on 29.600 MHz Simplex and 29.680 Mhz repeat for the local system.

Direct replies. please!

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, ARRL LM, TS (WNY Section),
VP/BARK,
Trustee, KB2YTW/B 10 Mtr Milliwatting Beacon (250 mW @ 28.2870 MHz)
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: James Parsons <k5rov1@worldnet.att.net>
Subject: [6981] MPF-105/102
Message-ID: <1.5.4.32.19961223021547.00686884@204.127.3.1>

While repairing my "new" HW-8, I found the MPF-105, the receiver R.F.
amplifier, was bad. I replaced it with an MPF-102 which seems to work just
fine. Would it be worth the time, cost and effort to procure an MPF-105 in
place of the MPF-102? The nice thing about the 102 is that it is available
from the local Radio Shack, and the 105 is not.

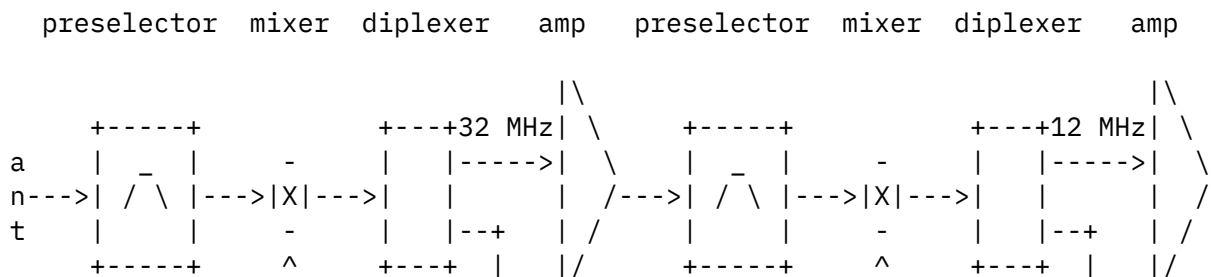
Thanks gang, and 73...

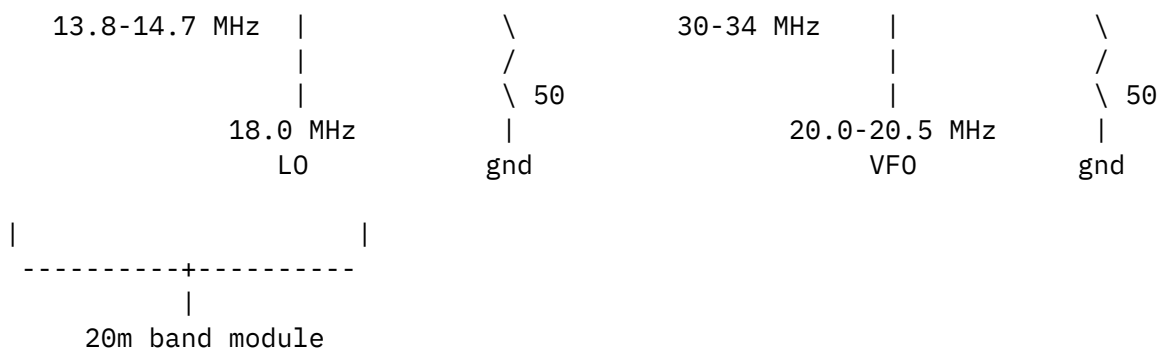
Jim, K5ROV

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: 23-Dec-1996 1102 <randolph@asic.ENET.dec.com>
Subject: [7008] N100Q RX #4: block diagram, filter tradeoffs
Message-ID: <9612231607.AA06946@us4rmc.pko.dec.com>

No. 4

Ok, at this point we've gone far enough along with the verbal description
that it's time to attempt a partial block diagram:





We've examined the selection and problems of IF frequencies, now let's start going over the tradeoffs of these various circuits in detail.

The preselectors are simply bandpass filters. Before this, I've been saying that a simple lowpass filter would be plenty to keep crap out of the receiver. That's true as far as image and IF rejection. There's more, though. We have introduced the IF amps above in the block diagram. Amplifiers in an ideal world would be totally linear. In other words, the output would be an exact amplified replica of the input. In the real world, all amplifiers add some distortion to the signal. This distortion is similar to that in the mixer products table of article no. 2. Every signal into the amplifier mixes slightly with every other signal, producing output that we don't want. This is IMD, intermodulation distortion, or intermod. Also, all amplifiers have a definite amount of power that they can source to the next stage. If one strong signal, well out of the band we're interested in listening to, were to use up all of that power, there would be none available for the signal we want to hear. Our receiver would seem "deaf" for no apparent reason. This is known as overloading or desense. Yet another problem is caused by the mixer: Any random noise, at any freq, reaching it will get mixed with the signals we want to hear, making them noisier. This is called noise modulation.

Obviously, it would behoove us to only allow a minimum range of signals into the mixer and amp. A filter that passes the whole band we're interested in, and not much more, is ideal. In practice, very small passbands are difficult to get without introducing a lot of insertion loss. The filter is made just wide enough to reduce the loss to an acceptable level. Also, very narrow passbands tend to result in extremes of component values. A slightly wider than ideal filter is sometimes necessary in order to be able to build it with real components.

There are several easily-constructed bandpass filter types to choose from: Butterworth, Chebyshev, Elliptical, etc. Any of these are readily built with practical inductors and capacitors at HF. The differences are in the mathematical description, the slope of the cutoff, and the change in phase vs freq. We only need to concern ourselves with the cutoff of our preselectors. For the most part, it's not too critical how sharply the filters cut off the unwanted freqs. The signals that will cause the biggest problems are many MHz

away - the images and the IF. They will be heavily attenuated no matter which filter type we select. When the slope of the cutoff isn't critical, Butterworth is probably the best choice. Its passband is flat, and it's easily tuned by peaking a signal. All of the preselectors are Butterworth except the 160m filter. At 1.8 MHz, the cutoff is indeed critical: the AM broadcast band is only 200 KHz away. A Chebyshev filter provides the sharper cutoff we need, while still being fairly easy to tune. The passband is not flat like Butterworth, but has some slight ripple. Elliptical filters allow even sharper cutoff than Chebyshev, but there are several tuned traps that aren't easily adjusted without a spectrum analyzer.

The 32 MHz bandpass filter before the 2nd mixer is considerably less critical than the band module filters. It's there mainly to stop any oddball mixer products of the 1st mixer from reaching the 2nd mixer. Also, we want to cut down the bandwidth of the noise generated in the 1st IF circuits before it reaches the 2nd mixer. In modern synthesized rigs, this would be a fairly broadband crystal filter. With our wideband 1st IF, 32.0-32.5 MHz or so, we can't use crystals, so we just chop it down as narrow as possible without too much insertion loss, using a Butterworth filter. This is the highest-freq LC filter in the receiver, so some of the components will have impractically small values if the bandwidth is too small. A bandwidth of around 4 MHz is about the best compromise between images, noise, and component values.

These N100Q RX postings are intended to be a learning exercise for the QRP-L folks, so if you have questions or comments, post them! How's the level of detail? Too much or too little?

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=====
Tom Randolph  N100Q  NE-QRP 419  QRP-L 87  ARRL      randolph@asic.enet.dec.com
=====
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From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: "Timothy R. Gordish" <105020.2634@compuserve.com>
Subject: [6991] No Monday N/T Fox
Message-ID: <199612230006_MC1-DC9-B2CC@compuserve.com>

Due to rig/antenna difficulties, and changes. I will not be running N/T fox tomorrow night. I will as be unsubscribing to list for a little while until I am able to get things straightened out. Don't worry I'll be back soon. Probably about the time I get my 38 special kit. I will keep you posted as to whether I am able to run other fox nights.

73 and good night,
Tim G.
KB9LGJ
Yuma, AZ

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: "Bernard F. Gaffney, Jr." <70272.2555@CompuServe.COM>
Subject: [7026] Of interest to CI\$ Members on QRP-L
Message-ID: <961223223005_70272.2555_JHD60-1@CompuServe.COM>

Not exactly QRP related, but definitely of interest to QRP-L members who use Compu\$erve to access the list(those that don't please hit your delete key now):

My CIS mailbox recently filled up with a total of 49 messages from the list(there were no other messages in the mailbox, just the 49 from QRP-L; when I download messages to my PC, they're supposedly deleted off CIS' mail server). When I signed on to access my messages, I was greeted with a message that my mailbox was full and two messages had bounced. When I inquired of CIS support, I was told

>Re: CompuServe Mailbox

>This message is in response to your recent inquiry regarding your CompuServe Mailbox. Your Mailbox can >hold up to 100 messages. After that limit is reached, messages are returned to the sender as undeliverable >and you will need to delete messages from your Mailbox before you can receive more.

No explanation as to why the 49 messages filled up the mailbox. I always thought 49 was less than 100. Guess not, at least according to CIS math. I've since changed to Digest mode. You may want to do so, too.

Sorry for the use of bandwidth. Just wanted to alert other CIS users. (Maybe I'll switch over to using my ATT WorldNet account for QRP-L).

73 de N8PVZ

---bernard gaffney

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: NilsBull@aol.com
Subject: [7016] PTO rebuilds & other thoughts of considerable folly
Message-ID: <961223140901_1687809688@emout04.mail.aol.com>

I got the PTO rebuild kit from Ten Tec today. I remember a lot of folks talking about all the fun they had doing this, so I figured I'd get some commiserative responses if I said that I was medicated up good to do this.

I've had the PTO out before, mind you, to fix that busted up plastic thing on the butt end of it what I replaced with homebrew metal (and yes, I know the coil insert's supposed to float, but I didn't like that & fixed it my way anyway 'cause it was busted up). I figure that I should do it somewhere like a clean room or a litter box so as not to lose everything at once... yeah, right.

I also have to replace a couple coils on the osc/mixer board 'cause I munged 'em up good screwing around with band-pass +c. Dad was right: "You keep messing with that and you're gonna break it." Yup, I did.

But while I was thinking about all this, a wild, hairy thought crawled into my left ear and went directly to my beavis-lobe. Here's the sneak:

Has anyone ever tried to replace the mechanical innards of a PTO with a multi-turn, fancy-schmancy pot, thus making it a VCO of sorts? I've got a big blue multi-turn doodad in the collection of busted up stuff and have had wild ideas about doing something like that. Hmmm..... And yeah, I know, it's gonna be non-linear one direction or the other and I'll have to use a digitalized reader-outer but that's part of the plan anyway, so there.

Any comments?

73

Nils

WB8IJN +c

Mr. Greaser: "Koo-koo." (Pause) "I'd just wish that I could put my arms around each and every one of them and tell them that everything's going to be alright."

Koo-koo: "So why don'tcha, see?"

Mr. Greaser: "I'm not bizarre enough."

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996

From: "Ralph L. Irons" <rli8m@weyl.math.virginia.edu>

Subject: [7012] Ramsey Linear

Message-ID: <Pine.A32.3.93.961223124510.34772A-100000@weyl.math.Virginia.EDU>

I ordered the Ramsey 20 meter linear to bring my WM-20 up to a full 10 W. Wish I could recommend the amp, but 1) the bias circuit just does not work, at least not with the supplied components (I modified it to get bias) and 2) the amp is unstable (I modified the negative feedback circuit to get stable operation). The heat sinks are too small, and the case needs to be ventillated (shotgun?)

Glad I had a vacation to fuss with it!

72, Ralph N7RI (QRP Full Gallon SSB on 20m -- until the PA blows!)
Charlottesville VA

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: ed.welch@cheaha.com (ED WELCH)
Subject: [6996] Rat Shack and QRO CB's
Message-ID: <8CEB1A6.000400107A.uuout@cheaha.com>

Just curious here about something. Nothing has changed about the power limitations of CB's has it? A non-ham friend of mine told me that a Rat Shack in a neighboring town has "on display" a specific Cobra CB with a 50w amp built onto it. Also several larger amps were there were sale. This isn't a "company store" but a franchise or whatever. The power limit **is** still 4w isn't it? Tnx fer your reply.

MERRY CHRISTMAS !!!!!!!!!!!!!!!

72/73

Ed Welch KF4KRV

QRP-L #873

Luverne, Alabama

Crenshaw County - Grid EM61

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+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+
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> Isn't "time" a 4-letter word? <

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: n4so@juno.com
Subject: [6987] RECHARGEABLE BATTERIES
Message-ID: <19961222.233444.5223.16.N4SO@juno.com>

In the magazine, ELECTRONIC DESIGN, for December 16, 1996 on page 105, "Rechargeable Power Options For Portable Computers", the discussion on five pages of text is on the Nickel-Metal-Hydride battery versus the Lithium-Ion battery for portable computers.

In a recent discussion of portable batteries versus weight no mention was made of Nickel-Metal-Hydrate or the Lithium-Ion based devices.

Ken Brown , N4SO
QTH: Nr Mobile, AL
QRP-L #622
n4so@juno.com

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
Subject: [6976] Repost: 102ft dipole tidbits

102ft Dipole Tidbits from W6RCA, CecilMoore@delphi.com

Someone asked for permission to publish these tidbits in a QRP publication. I polished it a bit and here it is for those who would like an electronic copy but erased it already.

It's hard to believe the interest the QRP group has demonstrated in more efficient antenna systems. Here are a few tidbits about a 102 ft center-fed dipole at 60ft high (the G5RV length). There is no coax used except the run from the 4:1 balun to the transmitter sees a perfect SWR of 1:1.

The following figures are approximations from EZNEC.

Freq.	SWR on 300ohm line	SWR on 45ohm line
3.8	14:1	15:1
7.2	11:1	8:1
10.125	23:1	15:1
14.2	3:1	4:1
18.14	12:1	8:1
21.3	13:1	10:1
24.95	4:1	4:1
28.4	10:1	7:1

Note that, using 450 ohm feedline, the SWR on 30m and 80m is the same so if this is a good length for 80m, it is also a good length for 30m (assuming no coax). A G5RV doesn't work very well on 30m because of the coax. Get rid of the coax and it works as well on 30m as on 80m.

One can use an inexpensive pickup loop to find the current

maximum point on the ladder-line. The antenna *system* is resonant at the current maximum point. Here's the purely resistive impedances predicted by EZNEC at the I_{max} points, occurring at an approximate distance from the antenna.

Freq.	Resistance using 300 ohm line	Resistance using 450 ohm line
3.8	21 ohms at 26 ft.	30 ohms at 29 ft.
7.2	27 ohms at 87 ft.	56 ohms at 96 ft.
10.125	13 ohms at 58 ft.	30 ohms at 64 ft.
14.2	100 ohms at 82 ft.	113 ohms at 90 ft.
18.14	25 ohms at 78 ft.	56 ohms at 86 ft.
21.3	23 ohms at 83 ft.	45 ohms at 91 ft.
24.95	75 ohms at 75 ft.	113 ohms at 83 ft.
28.4	30 ohms at 79 ft.	64 ohms at 87 ft.

Note that almost all these points result in 50 ohm SWRs of 2:1 or less, an efficient operating point without a tuner, or an easy match for most antenna tuners. To take advantage of the above, we must have some way of varying the length of the transmission line. We can do it with relays, switches, or pluggable lengths of ladder-line. If we decide to tolerate the losses in relatively short lengths of coax, we can use parallel runs of coax instead of ladder-line and JUST COIL THE VARIABLE LENGTH SECTIONS UP IN A SWITCH BOX.

I have tried all of the above and presently use 16,8,4 ft lengths of line to achieve any length between 0ft and 28ft. I have a variable capacitor that slides back and forth on 4 ft parallel runs of #10 bare copper wire to achieve perfect 1:1 SWRs with minimum losses. Except for 80m and 30m, I_{max} points occur on all the other HF bands between 70ft and 90ft from the antenna feedpoint for 300 ohm line and 77ft and 99ft for 450 ohm line. On 40m and 20m-10m, locating the capacitor a little closer to the transmitter than the I_{max} point results in a perfectly resistive 200 ohms, a perfect match for my 4:1 balun, and a perfect 50 ohm SWR of 1:1. The ladder-line is near lossless, the variable capacitor is near lossless, and the Amidon HBHT200 4:1 balun is near lossless. I don't know of a more efficient way to match a non-resonant length radiating element.

80m and 30m present a special problem. On 80m the I_{max} points are at 26ft and 26ft+halfwavelength= 125ft for 300ohm line and 1.1 times that for 450ohm line. So I use two series toroidal inductors on both 80m and 30m located around 82ft for 300ohm and 92ft for 450ohm line. Toroidal inductors are more lossy

than caps but I didn't want to have to use 140ft of 450 ohm ladder-line to access an Imax point on 80m. Even with the losses in the toroids, my 75m signal is 1-2 'S' units better than when my 4:1 balun was seeing 2000+j2000 ohms.

Anyone wishing to duplicate my efforts, I suggest you first optimize your antenna for your favorite band and evaluate the results. Tuned properly, you won't be able to tell your 102ft dipole from a resonant dipole on 40m. With approximately 96ft of 450ohm window-line, the impedance presented to a 1:1 balun will be approximately 56 ohms.

73, Cecil, W6RCA, Old Old Timer's Club
Talk to ya'll next year - Happy New Year.

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: cjsterl@ix.netcom.com (Craig J. Sterling)
Subject: [7011] Rig advice
Message-ID: <199612231722.JAA07131@dfw-ix8.ix.netcom.com>

Greetings,

Does anyone have any experience with the Icom IC730 OR IC735? Thinking about purchasing a small foot-print all band back-up rig and it has been suggested these might "fill the bill".

Any thoughts would be greatly appreciated.

Happy holidays to all!

Craig, AA3MD

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Jeff Grudin <grudin@pacific.vdbs.com>
Subject: [6986] Sierra First QSO
Message-ID: <32BDFBD0.2640@vdbs.com>

Well I finished my Sierra and the 20M module last week. I've been so busy I haven't had time to get it on the air. This afternoon the wife and kids went shopping and I got my chance. I tuned 14.060 and called CQ for a while, nothing. I tried tailgating a qso to a guy in NM, nothing. Hooked it back up to my scope. Yup, there was power to the antenna alright.

The band was fairly dead. Found only one signal with a small pileup, LU3XQ. Argentina is usually pretty easy I'll give it a try. Gave my call, nothing. Repeated this several times, nothing. One last try, as I finished my call another guy started his. I don't know how much power he was using but there were two rows of lines on my KC2 S-meter. When he stopped signing (and my hearing returned), the DX came back "AC6?? 549". I sent his report and repeated my call/QRP. He came back with his QTH in Tierra Del Fuego. 7400 miles. Not bad for the first contact. I guess it works.

Sure beats watching TV.

72 de Jeff AC6KW
grudin@vdbbs.com

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: jerryh@webzone.net (Jerry Henshaw)
Subject: [7007] Starting a Tulsa, OK QRP Club?
Message-ID: <01BBF0B8.15FA6240@pm1.ppp2.webzone.net>

Hi Gang,

Sorry for the bandwidth. I feel this is the absolute best forum to get =
a message out to the QRP community. If there are any hams in Tulsa who =
would like to start a QRP group, please email me or call me at (918) =
496-3775. Nothing formal, just a get together ala NORCAL once in a =
while. =20

72's and Merry Christmas,

Jerry Henshaw
KR5L / QRP

jerryh@webzone.net

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: ed.welch@cheaha.com (ED WELCH)
Subject: [7010] Take off angle...
Message-ID: <8CEB1CB.000400107D.uuout@cheaha.com>

-> >From: ed.welch@cheaha.com (ED WELCH)

-> >Speaking of take-off-angles, Cecil, I've got a loop with the bottom

-> at >abt 12' and a dipole at abt 32'. I guess that the dipole should
-> have a >lower take off angle than the loop, eh? And, thus be better
-> for DX?

-> Hi Ed, I'm assuming that's a horizontal loop at 12'. Of course, a
-> dipole at 32' has a lower TOA than a horiz loop at 12' on the lower
-> HF frequencies. In general, horiz loops are good for close-in stuff
-> and vert loops are good for far-out stuff.

Tnx fer the reply, Cecil. Well the loop in question is vertical...I
simply threw the fishing line over the top of the pecan tree and
eventually fished speaker-wire around to encircle the tree. Ended up
being a pretty good-looking eggshape....just having trouble figuring out
how to mount it on a Ham-V.<grin>

As for the horiz loops, I've got a good friend whom I'm hoping will have
his license before long....he's only abt 120mi from me and I'm thinking
horiz loops or maybe very low dipoles for this connection.

-> For the lower HF frequencies, if the bottom of your *vertical*
-> loop is at 12' and its top is
-> at the same height as the dipole, you will get more low angle
-> radiation from the vertical loop than from the dipole if you feed the
-> loop at the center of a side because the fields generated by the
-> horizontal elements of a vertical loop fed mid-point of a
-> side tend to cancel, resulting in primarily vertically-polarized,
-> low-angle radiation. In fact, a vertical loop fed mid-point on
-> a side acts somewhat like two elevated phased verticals. The
-> horizontal elements act somewhat like a balanced transmission
-> line with a rather large characteristic impedance.

Now we talking. The only thing is that the feedpoint is more at the
7 o'clock position and not centered on the side. I tried raising the
feedpoints height but it increased the impedance and threw the SWR up
high. Sounding good though, now to put yet another loop at right angles
to the present one! :)

Take care es MERRY CHRISTMAS!!!!!!

72/73

Ed Welch KF4KRV

QRP-L #873

Luverne, Alabama

Crenshaw County - Grid EM61

```
+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+
```

> Isn't "time" a 4-letter word? <

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: James Parsons <k5rov1@worldnet.att.net>
Subject: [6977] Thanks, gang...
Message-ID: <1.5.4.32.19961223000521.0066e684@204.127.3.1>

Thanks to all who responded to my query about the keyer/counter. I found the Wilderness page, as recommended by you, and there it is. I shall order one for my lil HW-8 this week. Thanks again...

Jim, K5R0V

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: macdondd@cadvision.com (Duncan David Mac Donald)
Subject: [6985] Thankyou Jerry Alan and Steve
Message-ID: <199612230247.TAA06596@huey.cadvision.com>

A Special Thankyou to jerry Henshaw also Alan w6rc1 and Steve k8idn for the prompt reply to my Qeery. Also to any others who are sending as well. THANKYOU GUYS and a Merry X-mas to all 72/73 de Duncan
]

QRP is getting the Most from the Least.

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Brad Mugleston <bmug@gwl.com>
Subject: [7018] Tins
Message-ID: <01BBF0C7.89E401C0@pps-pc10.gwl.com>

Howdy,

I was in Target the other day and saw a little tin box, round about the size of a CD. The curve was actually about 270 deg. with the last 90 deg being flat with a hinge. The Box was about 1 inch deep. cost was a few bucks which included some makeup - would make a nice present for a little girl, just find something to put the makeup in.

72's

de KBØROL, Brad

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Brad Mugleston <bmug@gw1.com>
Subject: [7021] Tins
Message-ID: <01BBF0D1.56E06C00@pps-pc10.gw1.com>

Hi,

I just went in to make some copies and someone had just replaces the toner cartridge in our Xerox 5365. The empty toner case was in the trash. It measures - about - 9 inches wide X 2 inches high X 8 inches deep and opens on the 2 inch end. Its made of hard plastic and has a hard plastic cover. It looks like it would make a good (not water tight but good) trail case. Look around and see what you can come up with.

de

KBØROL, Brad

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: jeffa@ix.netcom.com (Jeff Anderson)
Subject: [7003] Tuners: Balanced (was PI)
Message-ID: <199612231442.GAA28654@dfw-ix1.ix.netcom.com>

Chuck KE9UW wrote:

>

>Roger Traylor wrote:

>

>> However, if I replace the balun with a current balun to force equal
>> currents into both legs of the feed line it seems that I could
>> double the size of one inductor and remove the other. This would
>> greatly simplify the construction of the tuner.
>> It would look like this:

>>

>> note: cap is in only one of the two postions shown.

>> cap is shown in high-Z postion.

>> current balun is "beads-on-coax" type

>> rig floats in this scenario (not grounded)

>>

```

>>          -----inductor -----
>>          |               |
>> Rig      1:1 current balun (cap)      cap antenna
>>          |               |
>>          -----

```

>> What do you think?

>> Roger Traylor

>> WB4TPW

>I never did see why Rich Measures needed an inductor in both legs of
>the transmission line. If the antenna and the feedline are both
>balanced, and the L network (or PI) is isolated from anything else,
>then the system should stay balanced. I always thought this when the
>Measures article came out and recently read the same thing in a
>handbook or text from the 1950's. I wish I could remember which one.

I agree! I've never understood why one should incur the extra
complexity & cost of a balanced tuner when a balun, when used with an
assymetric tuner, will force the currents to be equal (note that the
balun can be at either the tuner's input or its output - it doesn't
matter where you place it). What do you gain with a balanced tuner?

I too recall seeing this issue discussed somewhere - it might have been
one of Roy Lewellyn's articles in the ARRL's Antenna Compendiums, but I
no longer recall.

By the way, where & when was Measures' article published?

- Jeff, WA6AHL

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [6988] WRC-99: US Position
Message-ID: <19961222.223304.4679.1.wb2vuo@juno.com>

This was passed on to me via packet...Keith, WB2VUO

=====

Follows a message received over the AA2AC-5 BBS and resent by KA2DQA FYI:

>From : G6JNS

To : NEWS@WW
Type/status : BF
Date/time : 21-Dec 20:16
BID (MID) : 8C0173G6JNS
Message # : 288317
Title : US government WRC99 proposals

From: G6JNS@GB7TJF.#45.GBR.EU
To : NEWS@WWW

The following extracted from the ARRL newsletter dated December 20, 1996 for which many thanks.

NTIA REPORT BULLISH ON ADDITIONAL HF ALLOCATIONS

High Frequency (3-30 MHz) Spectrum Planning Options, a planning document released December 13 by the National Telecommunications and Information Administration, says the HF spectrum is flexible enough "to accommodate most, if not all," demands for additional HF spectrum, including new and bigger HF ham bands. The NTIA is an Executive Branch agency in the Department of Commerce that's responsible for developing telecommunications policy and advising the President on telecommunications matters. The NTIA's latest report is a follow-on to an NTIA study released in March 1995 (see QST, Jun 1995, p 75).

The Options report addresses spectrum availability and long-range planning options for services that were identified in the earlier report as needing additional HF spectrum--including Amateur Radio. The report cites a potential 900 kHz or so of expanded or upgraded allocations for Amateur Radio in the HF spectrum, including:

- * An exclusive, worldwide allocation at 3500 to 3800 kHz
- * A new band at 4945 to 4995 kHz (additional technical studies would be required)
- * An "aligned worldwide" allocation at 6900 to 7200 kHz (replacing the current band at 7000 to 7300 kHz for the US and the rest of Region 2)
- * Expanded worldwide, primary allocations at 10100 to 10350 and 14000 to 14400 kHz
- * Expanded allocations at 18068 to 18318, 24740-24890, and 28000 to 30000 kHz.

Some of the potential expansions proposed for amateurs and broadcasting

are mutually exclusive or could involve sharing by the two services. These include the potential expansions at 30, 20 and 17 meters. According to the report, ham radio allocations account for 13.1% of the HF spectrum (3 to 30 MHz). "There are no current plans to auction any HF spectrum," the

NTIA

report states, but notes that additional allocations for ham radio would come at the expense of other services--primarily fixed, fixed-mobile and broadcasting. "The expansion and upgrading of amateur allocations in the 10 MHz, 14 MHz, 18 MHz, and 24 MHz [bands] appear acceptable; however, this will depend on future decrease of requirements for the aeronautical mobile

(R) or the fixed services internationally," the report said. Changes in the 80 and 40-meter bands "will require the inclusion of these proposals in US preparations for future WRCs," the report added. A requested allocation at 6900-7200 would serve "to reduce inter-regional sharing and interference from HF broadcasting in the 7100-7300 kHz band," the report said. The report called the requested upgraded allocation at 3500 to 3800 kHz

"a good candidate for a common worldwide exclusive amateur allocation at the

3.5 MHz band." The additional allocation of 3800 to 4000 kHz to the Amateur

Service in Region 2 would not be affected.

To help satisfy demand for additional HF spectrum access, the report suggests more efficient use of current allocations, moving current HF spectrum users to other portions of the HF spectrum, use of other non-spectrum technologies and use of higher frequencies. The report also said sharing--and removal of some "exclusive" allocations--might be another option.

Calling ham radio "the oldest radio service" and one that "pre-dates regulation," the NTIA report casts the hobby in a favorable light. "Radio

amateurs have made significant contributions to the field of radio propagation, HF single-sideband radio, HF data communications systems, packet radio protocols and communications satellite design." The report goes on to say that ham radio "continues to play an important role in disaster-relief communications, where amateurs provide radiocommunications independent of the telephone network or other radio services."

To view the complete report, set your Web browser to <http://www.ntia.doc.gov/osmhome/reports/hfspo/contents.html>.

73 - Peter, G6JNS @ GB7TJF

Message timed: 10:46 on 21 Dec 96

Sent using Winpack Registered version 6.1

--- End of message #288317 to NEWS from G6JNS ---

Hope you found this as interesting as I did. 73, de Lou KA2DQA

Resent by paKet 6.1 <so there, WinPACK!>

=====

I LIKE the 60 Meter band proposal, but where do I put up yet another antenna in the yard???

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, ARRL LM, TS (WNY Section),
VP/BARK,
Trustee, KB2YTW/B 10 Mtr Milliwatting Beacon (250 mW @ 28.2870 MHz)
"In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: PA3ASC@mailbox.hol.nl (Mike Perry)
Subject: [6994] Re: "QRP is too hard for beginner" my.....!" MY!
Message-ID: <199612230805.JAA20570@bonny.hol.nl>

Nils WB8IJN wrote:

>But QRP is NOT too hard for beginners.

>

I agree with Nils.

In fact QRP can be a good way to start.

My first rig, 18 years ago with the ink just wet on my licence, was an HW8. The QSO rate was about zero for a couple of weeks until the construction of a QRP directional wattmeter and a lash-up L-section ATU was complete. Having now sworn fealty to the maximum power transfer theorem and the concept of a conjugate-matched load, the whole of Europe was at the disposal of my one watt and 20-metre band dipole. And not having a microphone in the shack did wonders for improving one's CW skills in those days.

Cheers for now es 73 de PA3ASC

--

Regards,

Mike Perry. [e-mail :- PA3ASC@mailbox.hol.nl]
=====

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Patrick Taber <ptaber@logiccraft.com>
Subject: [6999] Re: Antenna close to roof
Message-ID: <1.5.4.32.19961223134852.009b5d4c@freebird>

At 08:19 PM 12/20/96 -0800, you wrote:

>I am in a wood and stucco house with a composition roof. I wonder if there
>is any point to my trying to use a dipole type antenna without traps if the
>antenna is at some points only about 5 or ten feet above the roof.

Sure wish mine could be five or ten feet above the roof -- I'm running about
three feet under the roof with an attic dipole. Is there interaction? Yeah.
But so does everything else in the real world. Try for the best theoretical
setup you can manage, then work with what you've got.

>>>==>PStJTT (KC1TD)

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Ed Tanton <n4xy@avana.net>
Subject: [6990] Re: Connector Losses
Message-ID: <3.0.32.19961222235037.00950df0@tiger.avana.net>

THAT's really interesting Joe... I have always 'heard' to think about 0.1
dB / connector. Never thought to perform a simple test like that. Great
idea the guy had!!!

Season's Greetings!!!

At 07:11 PM 12/22/96 -0700, Joe Gervais wrote:

>

>Howdy All,

>

>Just to add another data point to the topic of
>RF connector losses, in the latest Aerials column
>(Jan. issue of Worldradio) the author states that
>in a laboratory setup he hooked up 20 UHF connectors
>in a row.

>

>Measured loss? At 28MHz, less than 1dB.

>
>Ho Ho Ho de KC7NEV,
>
>-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)
>
>
>
72/73

Ed Tanton N4XY EMAIL: n4xy@avana.net TEL: (770)579-3933 V/MBX/FAX
189 Pioneer Trail, Marietta, GA 30068-3466

QRP-ARCI#7663 G-QRP#6779 OK-QRP#172 QRP-L#758 AdvRC#140
NORCAL#1779 NCDXF SEDXC

Life Member: ARRL AMSAT IDRA INDEXA QCWA URL: Coming Soon

"Think you can, think you can't: either way you're right!" Henry Ford

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Ed Pacyna <pacyna@auratek.com>
Subject: [7025] Re: Far Circuits phone nr?
Message-ID: <9612232207.AA13012@galaxy.auratek.com>

Voice/Fax: 847-836-9148

email: farcir@ais.net

Web: <http://www.cl.ais.net/farcir>

At 04:44 PM 12/23/96 -0500, you wrote:

>Just tried to call Far Circuits 708-836-9148 per their Aug 95 order form.
>Operator tells me that number is no longer in service. Anybody know if they
>have a new number?
>Floyd NQ7X Phoenix ScQRPion dm33uq

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T E C H N O L O G I E S	
Enterprise Workstation Connectivity	

Ed Pacyna
p: (617) 290-4800 x142
f: (617) 290-4844
e: ed@auratek.com
w: <http://www.auratek.com>

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: rob3ert@juno.com (Robert G. Parks)
Subject: [7027] Re: Far Circuits phone nr?
Message-ID: <19961223.151227.12070.1.rob3ert@juno.com>

Floyd,

The number I have is the same EXCEPT the area code I have is (847). That might be the problem.

GL

72/73

Bob Parks K6AEC

On Mon, 23 Dec 1996 16:44:32, -0500 SYDV00A@prodigy.com (FLOYD SMITHBERG) writes:
>Just tried to call Far Circuits 708-836-9148 per their Aug 95 order
>form.
>Operator tells me that number is no longer in service. Anybody know if
>they
>have a new number?
>Floyd NQ7X Phoenix ScQRPion dm33uq
>
>

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: JCoote@aol.com
Subject: [6980] Re: Flying and radios.....
Message-ID: <961222210115_1389832208@emout02.mail.aol.com>

My advice on travel or flying would be to check it out carefully before you go.

In the US and other civilized, techno-nerd countries it is sometimes hard to imagine, but some other countries are concerned about espionage and terrorism and take a 1950's mind-set. These are not very high-tech countries, so their idea of espionage may be a 2-meter handheld with 16 DTMF keys on the keypad, or CW/QRP radios in the attic.

Airport and border guards are minimum wage earners who cannot understand technical explanations of radio equipment.

Check it out thoroughly before you go.

73, Jay
W6CJ

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Ken Lopez <kjlopez@earthlink.net>
Subject: [6978] Re: Fw: Airline travel questions
Message-ID: <32BD8F1C.1355@earthlink.net>

Hi Bob, and the Gang,

I have had the experience of explaining professional electronic equipment, and ham gear, to airline security. Handhelds can be explained as a "special cellular phone, sort of" with no trouble, as long as it can be turned on and make noise or show a display.

Small HF radios, especially homebrew, are more easily explained if you have a business card with the word electronics on it somewhere. Even a personal card would work. A copy of your licence will also be of help.

But if you can tie it to business or scientific research in some vague way, they will be ok. Just don't fabricate an outright, outlandish lie. As Cam said, common sense should prevail.

Another line that works is " computer accessories", but only if you have a computer with you.

If you pack gear in your checked bags, be sure that there are no batteries. They can be detected by xray, and your bags will be opened by security, and then examined by customs if on an international flight. Not fun! Small sealed gel cell batteries seem to be OK, but not in checked bags.

Be prepared to power up your box, and show that it works. Or be prepared to open it up.

Remember, many of these people work at the low end of the security

totem pole, receive little training, and have less technological savvy. Words and explanations that have the ring of truth and familiarity are what work. They see professional people carrying gear every day. Electronics, tool boxes, Oscopes, computers, etc. It is the out of the ordinary that they are looking for.

I have personally found that checking most gear, including tools, but no batteries, in a solidly built case or luggage, and hand carrying only the fragile and valuable items minimizes the hassle. Most airports in Europe will make you open all of your luggage for inspection before departing on international flights, so it is a moot point there. Also, as mentioned, filing a manifest of your personal gear is important to establish ownership. Do this on departure, or before entry in another country, so there will be no problem on the way out.

That is about all I can offer.

73, Ken, N6TZV

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Bill Myers <bmyers@destin.nfds.net>
Subject: [7001] Re: No Monday N/T Fox
Message-ID: <1.5.4.16.19961223082041.1e6f6c0c@destin.nfds.net>

At 12:05 AM 12/23/96 -0500, Timothy R. Gordish wrote:

>Due to rig/antenna difficulties, and changes. I will not be running N/T
>fox tomorrow night. I will as be unsubscribing to list for a little while
>until I am able to get things straightened out. Don't worry I'll be back
>soon. Probably about the time I get my 38 special kit. I will keep you
>posted as to whether I am able to run other fox nights.

Sorry to hear this, hope it all works out... Be looking for you after the first of the year...

Sooooooooooooooooo, no FOX tonight. Guess I'll have to hang out in the 40 novice band to keep from going into FOX withdrawal. Just don't seem right if I'm not dodging BCST stations anymore...

72

--
Bill Myers KK4KF Grid - EM60rk

FISTS#2390 QRP-L#755 ARCI#9282 scQRP#42 CQC#386
Snail Mail P. O. Box 178 Shalimar, FL 32579
e-mail <bmyers@destin.nfds.net>
homepage <http://destin.nfds.net/~bmyers/>
(Reptiles/Emergency Services/Amateur Radio)
CHECK OUT THE FISTS INTERNATIONAL CW CLUB U. S. HOMEPAGE
<http://n9nvv.qrp.com/~fists> (That's N 9 N V V)

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Bill Myers <bmyers@destin.nfds.net>
Subject: [7015] Re: No Monday N/T Fox
Message-ID: <1.5.4.16.19961223131507.09bfabf4@destin.nfds.net>

At 12:05 AM 12/23/96 -0500, Timothy R. Gordish wrote:

>Due to rig/antenna difficulties, and changes. I will not be running N/T
>fox tomorrow night. I will as be unsubscribing to list for a little while
>until I am able to get things straightened out. Don't worry I'll be back
>soon. Probably about the time I get my 38 special kit. I will keep you
>posted as to whether I am able to run other fox nights.

Sorry to hear this, hope it all works out... Be looking for you after the
first of the year...

Soooooooooooooooooooo, no FOX tonight. Guess I'll have to hang out in the 40
novice band to keep from going into FOX withdrawal. Just don't seem right
if I'm not dodging BCST stations anymore...

Anyone looking for Florida for a test run, I'll be HIGH in the novice
band... 7.133 +/- from 0100-0200 UTC. I've had pretty good luck up there
this week, it's been kinda quiet.

72

--
Bill Myers KK4KF Grid - EM60rk
FISTS#2390 QRP-L#755 ARCI#9282 scQRP#42 CQC#386
Snail Mail P. O. Box 178 Shalimar, FL 32579
e-mail <bmyers@destin.nfds.net>
homepage <http://destin.nfds.net/~bmyers/>
(Reptiles/Emergency Services/Amateur Radio)
CHECK OUT THE FISTS INTERNATIONAL CW CLUB U. S. HOMEPAGE
<http://n9nvv.qrp.com/~fists> (That's N 9 N V V)

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Bill Myers <bmyers@destin.nfds.net>
Subject: [7020] Re: No Monday N/T Fox
Message-ID: <1.5.4.16.19961223142932.19e74c1c@destin.nfds.net>

Hi Again Everyone...

> Anyone looking for Florida for a test run, I'll be HIGH in the novice
>band... 7.133 +/- from 0100-0200 UTC. I've had pretty good luck up there
>this week, it's been kinda quiet.

The reason I'll only be there from 0100-0200 UTC is that I'm gonna catch
the real fox at 0200! I figure yall'll have him worn out by then and maybe
I can catch him easily...

72/73

Bill KK4KF

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: cooper@gmpvt.com (Tom Cooper)
Subject: [7019] Re: PT0 rebuilds & other thoughts of considerable folly
Message-ID: <199612232038.PAA06526@web.gmpvt.com>

Nils (and others),

I'm an older T-T hacker, too, and you can make the RIT do
some of the stuff you mention.

A 10 turn pot wouldn't cover 500 kHz very nicely, but you
could apply the same voltage on R and T to the rit varactor
in the PT0 via a 10 turn pot and have some real sslllooowwww
transceive tuning. Check out the rit/xit/fast/slow switching
in the Corsair II manual for "how to get the greatest number of
features with the fewest possible parts".

Which model are you goofing up now?

Tom W1EAT (ex WA1GUV)

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [6997] Re: Rat Shack and QRO CB's
Message-ID: <Pine.3.89.9612230736.G659-0100000@w3eax.umd.edu>

Yup. Call the FCC and grab your video camera!!!

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

On Mon, 23 Dec 1996, ED WELCH wrote:

> Just curious here about something. Nothing has changed about the power
> limitations of CB's has it? A non-ham friend of mine told me that a Rat
> Shack in a neighboring town has "on display" a specific Cobra CB with a
> 50w amp built onto it. Also several larger amps were there were sale.
> This isn't a "company store" but a franchise or whatever. The power
> limit *is* still 4w isn't it? Tnx fer your reply.

>

> MERRY CHRISTMAS !!!!!!!!!!!!!!!!!!!!!

>

> 72/73

> Ed Welch KF4KRV

> QRP-L #873

> Luverne, Alabama

> Crenshaw County - Grid EM61

> +-----+

> -----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----

> +-----+

>

> > Isn't "time" a 4-letter word? <

>

>

>

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: km1h@juno.com
Subject: [7029] Re: Rat Shack and QRO CB's
Message-ID: <19961223.183911.7111.17.km1h@juno.com>

The law hasn't changed, just the FCC enforcement division. You can go to

many major Truck Stops now and buy all sorts of Kenwood ham gear plus
amps up to 1200W or so. That poor RS guy pbly just trying to compete!!

Just a sign of the times I guess. The FCC doesnt "want to know" anything
these days unless it can improve their bottom line (read: Budget). Any
enforcement action has to be equated with a very high probability of
conviction. Sometimes even the good guys lose....going back to Greek
history.

Merry Christmas to all too.....Carl KM1H

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: tahrens1@juno.com
Subject: [6992] Re: RECHARGEABLE BATTERIES
Message-ID: <19961223.004340.6638.0.tahrens1@juno.com>

My 2cents worth.... I've used the NMH batteries exclusively in
a Motorola HandieTalkie - (Visar) that I use for VFD work..
I've found that the 4%per day discharge rate is about right.
Much much worse than the typical Ni-Cd equivalent. Also,
it appears that they can't take the same type of use... I charge
the battery every other day, and they seem to last about 6
months... funny about that, since Motorola has changed their
replacement policy from 1yr to 6months on those batteries!

My only experience with the Lithium-ion is on the laptop that
I use for work. I ordered 3 batteries for it, and finally got around
to using the 3rd one last week (it was purchased about 2
months ago). That battery had been charged at the factory,
and still gave me a couple of hours of real work. I'd say it
has a self-discharge rate about like an alkaline!

thanks!

Tim W5FN

p.s. I sent out a message a couple of months ago on a
product called a 'Solargizer', which supposedly gets rid
of the sulfation that plagues acid type batteries. Well, I
am currently evaluating one, and will let you all know how
it works out. Supposedly, it can even bring back batteries
that have been dead for a long time. It's first test is on a
15ah Gel Cell that has been in my garage for about a year.

more to follow

T

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
From: Ed Tanton <n4xy@avana.net>
Subject: [6993] Re: RECHARGEABLE BATTERIES
Message-ID: <3.0.32.19961223020029.0092ab70@tiger.avana.net>

Hi Tim... I have two NMH batteries for my several-year-old Gateway 2000 Handbook 486 that are the original batteries, and still seem to be performing about the same after at least 2 years of light operations. I KEEP one on trickle charge, and change over to charge the spare when I happen to think of it. All I can think of is that somehow either Motorola is overstressing those batteries somehow, or not making them very well to begin with... neither one what I would expect from Motorola!!! There IS a very finite number of charges NMH batteries can handle, and perhaps that is the difference-since my usage is very much lighter than yours... but it does not seem to explain it entirely to me.

Regards... and Season's Greetings!!!

At 01:41 AM 12/23/96 EST, tahrens1@juno.com wrote:
>My 2cents worth.... I've used the NMH batteries exclusively in
>a Motorola HandieTalkie - (Visar) that I use for VFD work..
>I've found that the 4%per day discharge rate is about right.
>Much much worse than the typical Ni-Cd equivalent. Also,
>it appears that they can't take the same type of use... I charge
>the battery every other day, and they seem to last about 6
>months... funny about that, since Motorola has changed their
>replacement policy from 1yr to 6months on those batteries!
>
>My only experience with the Lithium-ion is on the laptop that
>I use for work. I ordered 3 batteries for it, and finally got around
>to using the 3rd one last week (it was purchased about 2
>months ago). That battery had been charged at the factory,
>and still gave me a couple of hours of real work. I'd say it
>has a self-discharge rate about like an alkaline!
>
>thanks!
>
>Tim W5FN
>
>p.s. I sent out a message a couple of months ago on a
>product called a 'Solargizer', which supposedly gets rid
>of the sulfation that plagues acid type batteries. Well, I
>am currently evaluating one, and will let you all know how

>it works out. Supposedly, it can even bring back batteries
>that have been dead for a long time. It's first test is on a
>15ah Gel Cell that has been in my garage for about a year.

>
>more to follow

>
>T
>
>
>

72/73

Ed Tanton N4XY EMAIL: n4xy@avana.net TEL: (770)579-3933 V/MBX/FAX
189 Pioneer Trail, Marietta, GA 30068-3466

QRP-ARCI#7663 G-QRP#6779 OK-QRP#172 QRP-L#758 AdvRC#140
NORCAL#1779 NCDXF SEDXC

Life Member: ARRL AMSAT IDRA INDEXA QCWA URL: Coming Soon

"Think you can, think you can't: either way you're right!" Henry Ford

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: n4so@juno.com
Subject: [6998] Re: RECHARGEABLE BATTERIES
Message-ID: <19961223.085527.5223.17.N4SO@juno.com>

Paraphrasing from ELECTRONIC DESIGN..

The NiMH cells require substantially more attention to the details of their application to retain optimum performance. For example, the degree of overcharge built into the charging system must be closely controlled to avoid decreasing battery life. The charging electronics to sense a fully charged battery must be more sensitive than the NiCad.

1. Extended overcharging can have a significant impact on cell cycle life.
2. The voltage and temperature peaks used to trigger charger switching from rapid return of charge to a lower maintenance charging rate are much more subtle.

--from page 108 and 110

Ken Brown , N4SO
QTH: Nr Mobile, AL
QRP-L #622
n4so@juno.com

Ken Brown , N4SO
QTH: Nr Mobile, AL
QRP-L #622
n4so@juno.com

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: Bill Howell <bhowell@mail.utexas.edu>
Subject: [7009] RE: RS Nova 44 headphones on sale
Message-ID: <199612231701.LAA03756@mail.utexas.edu>

Brad..

Thanks for the tip on the headphone sale. I bought a set and found that they are more comfortable than some of the RS units that have the raw-foam-pads-against-the-ears design.

Also, they sure beat the Walkman-style in-the-ear type I have been using!

You wrote:

"Just went by Radio Shack - their Optimus NOA44 headsets are half price. These are full ear light weight sets that see to work just great with my Explorer and now at \$12.95 were too good to pass up (now I have two sets).

Brad Mugleston - KB0ROL"

Bill Howell
University of Texas at Austin
Performing Arts Center
Electronic Maintenance
bhowell@mail.utexas.edu
N5ALO QRP-L #415

everything is sacred

nothing is serious

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Subject: [7005] Re: Tuners: Balanced (was PI)
Message-ID: <32BEA3C9.340B@uiuc.edu>

Jeff Anderson wrote:

>

> Chuck KE9UW wrote:

> >

> > Roger Traylor wrote:

> >

> >> However, if I replace the balun with a current balun to force equal
> >> currents into both legs of the feed line it seems that I could
> >> double the size of one inductor and remove the other. This would
> >> greatly simplify the construction of the tuner.
> >> It would look like this:

> >>

> >> note: cap is in only one of the two postions shown.

> >> cap is shown in high-Z postion.

> >> current balun is "beads-on-coax" type

> >> rig floats in this scenario (not grounded)

> >>

```
> >>      -----          -----inductor -----
> >>                               |               |
> >> Rig      1:1 current balun  (cap)           cap antenna
> >>                               |               |
> >>      -----          -----
```

> >>

> >> What do you think?

> >>

> >> Roger Traylor

> >> WB4TPW

> >

> > I never did see why Rich Measures needed an inductor in both legs of
> > the transmission line. If the antenna and the feedline are both
> > balanced, and the L network (or PI) is isolated from anything else,
> > then the system should stay balanced. I always thought this when the
> > Measures article came out and recently read the same thing in a
> > handbook or text from the 1950's. I wish I could remember which one.

>

> I agree! I've never understood why one should incur the extra
> complexity & cost of a balanced tuner when a balun, when used with an
> assymetric tuner, will force the currents to be equal (note that the

> balun can be at either the tuner's input or its output - it doesn't
 > matter where you place it). What do you gain with a balanced tuner?
 >
 > I too recall seeing this issue discussed somewhere - it might have been
 > one of Roy Lewellyn's articles in the ARRL's Antenna Compendiums, but I
 > no longer recall.
 >
 > By the way, where & when was Measures' article published?
 >
 > - Jeff, WA6AHL

Feb, 1990 QST.

Chuck, KE9UW

From owner-qrp-1@lehigh.edu Mon Dec 23 18:01:25 1996
 From: Roger Traylor <traylor@ECE.ORST.EDU>
 Subject: [6979] Re: Tuners: PIs
 Message-ID: <199612230125.UAA05629@holmes.ece.orst.edu>

L.B.and gang,

L.B. wrote,

> Cecil's note on parts availability reminds me that it is possible to build
 > a balanced network tuner. Design is no harder than multiplying and
 >description of balanced tuner.....

> The output will be balanced, and so will the input. Here is the
 > place--the input--to install a good 1:1 balun, since this is the spot that
 > will see resistive source and load. and more good stuff....

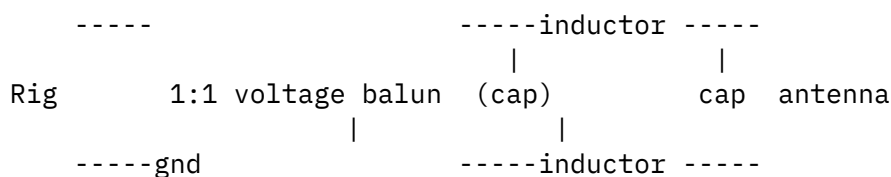
My question is, if I use balanced antennas fed with 450 ohm twin lead,
 should I use a balanced tuner of this variety for best effeciency?

I presently use a balanced tuner like this:

note: cap is in only one of the two postions shown.

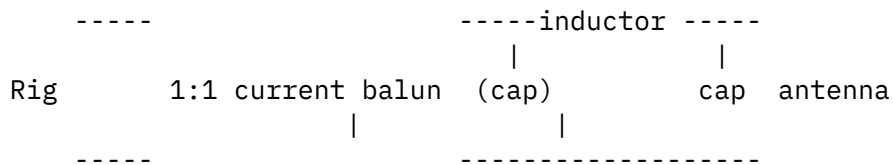
cap is shown in high-Z postion.

voltage balun has floating secondary



However, if I replace the balun with a current balun to force equal currents into both legs of the feed line it seems that I could double the size of one inductor and remove the other. This would greatly simplify the construction of the tuner. It would look like this:

note: cap is in only one of the two postions shown.
cap is shown in high-Z postion.
current balun is "beads-on-coax" type
rig floats in this scenario (not grounded)



What do you think?

Roger Traylor
WB4TPW

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Subject: [7002] Re: Tuners: PIs
Message-ID: <32BE9568.27C0@uiuc.edu>

Roger Traylor wrote:

> However, if I replace the balun with a current balun to force equal
> currents into both legs of the feed line it seems that I could
> double the size of one inductor and remove the other. This would
> greatly simplify the construction of the tuner.
> It would look like this:

>

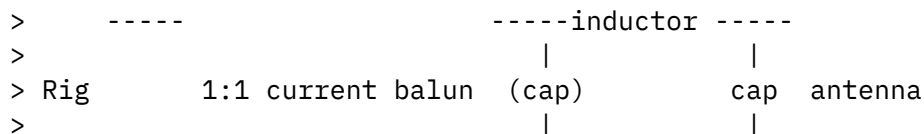
> note: cap is in only one of the two postions shown.

> cap is shown in high-Z postion.

> current balun is "beads-on-coax" type

> rig floats in this scenario (not grounded)

>



> -----
>
> What do you think?
>
> Roger Traylor
> WB4TPW

I never did see why Rich Measures needed an inductor in both legs of the transmission line. If the antenna and the feedline are both balanced, and the L network (or PI) is isolated from anything else, then the system should stay balanced. I always thought this when the Measures article came out and recently read the same thing in a handbook or text from the 1950's. I wish I could remember which one.

The beads on coax balun is not recommended due to the high loss in the beads which have to be high mu in order to effect enough inductance to work as a choke balun. A better balun would be one of the toroidal ones that Sevick describes in his writing. You could use a 4:1 and then you would be adjusting the L to 200 ohms resistive and the balun would efficiently transform that to 50 ohms. Amidon sells them.

Chuck, KE9UW

From owner-qrp-l@lehigh.edu Mon Dec 23 18:01:25 1996
From: n5zgt@swcp.com (Brian Mileschosky)
Subject: [6989] Re: WRC-99 HF Proposals?
Message-ID: <199612230418.VAA28922@kitsune.swcp.com>

>One of the locals here near the Great Bergen Swamp sez that there's been info on the World Radio Conference in 1999 (WRC-99), and some of the
>proposals being discussed now is expansion of the HF bands. From Lou's
>comments, 160 and 80 will be unchanged, proposed changes are on 40 & up,
>with 40 possibly moving to 6900 - 7200 KHz exclusive, 30 expanding to
>10.100 - 10.310 MHz, 20 to 14.000 to 14.450 MHz, 17 to 18.068 - 18.318
>MHz, 15 and 12 unchanged and 10 to 28.000 - 30.000 MHz.

>
>Anyone have any "real" dope to go with the rumors?
>

I know it's long, but it may well be worth the bandwidth! 72 and Merry Christmas, everybody!
Brian, N5ZGT

Received from last ARRL Letter (<http://www.arrl.org>)

High Frequency (3-30 MHz) Spectrum Planning Options, a planning document released December 13 by the National Telecommunications and Information Administration, says the HF spectrum is flexible enough "to accommodate most, if not all," demands for additional HF spectrum, including new and bigger HF ham bands. The NTIA is an Executive Branch agency in the Department of Commerce that's responsible for developing telecommunications policy and advising the President on telecommunications matters. The NTIA's latest report is a follow-on to an NTIA study released in March 1995 (see QST, Jun 1995, p 75).

The Options report addresses spectrum availability and long-range planning options for services that were identified in the earlier report as needing additional HF spectrum--including Amateur Radio. The report cites a potential 900 kHz or so of expanded or upgraded allocations for Amateur Radio in the HF spectrum, including:

- An exclusive, worldwide allocation at 3500 to 3800 kHz
- A new band at 4945 to 4995 kHz (additional technical studies would be required)
- An "aligned worldwide" allocation at 6900 to 7200 kHz (replacing the current band at 7000 to 7300 kHz for the US and the rest of Region 2)
- Expanded worldwide, primary allocations at 10100 to 10350 and 14000 to 14400 kHz
- Expanded allocations at 18068 to 18318, 24740-24890, and 28000 to 30000 kHz.

Some of the potential expansions proposed for amateurs and broadcasting are mutually exclusive or could involve sharing by the two services. These include the potential expansions at 30, 20 and 17 meters. According to the report, ham radio allocations account for 13.1% of the HF spectrum (3 to 30 MHz). "There are no current plans to auction any HF spectrum," the NTIA report states, but notes that additional allocations for ham radio would come at the expense of other services--primarily fixed, fixed-mobile and broadcasting. "The expansion and upgrading of amateur allocations in the 10 MHz, 14 MHz, 18 MHz, and 24 MHz [bands] appear acceptable; however, this will depend on future decrease of requirements for the aeronautical mobile (R) or the fixed services internationally," the report said. Changes in the 80 and 40-meter bands "will require the inclusion of these proposals in US preparations for future WRCs," the report added. A requested allocation at 6900-7200 would serve "to reduce inter-regional sharing and interference from HF broadcasting in the 7100-7300 kHz band," the report said. The report called the requested upgraded allocation at 3500 to 3800 kHz "a good candidate for a common worldwide exclusive amateur allocation at the 3.5 MHz band." The additional allocation of 3800 to 4000 kHz to the Amateur Service in Region 2 would not be affected.

To help satisfy demand for additional HF spectrum access, the report

suggests more efficient use of current allocations, moving current HF spectrum users to other portions of the HF spectrum, use of other non-spectrum technologies and use of higher frequencies. The report also said sharing--and removal of some "exclusive" allocations--might be another option.

Calling ham radio "the oldest radio service" and one that "pre-dates regulation," the NTIA report casts the hobby in a favorable light. "Radio amateurs have made significant contributions to the field of radio propagation, HF single-sideband radio, HF data communications systems, packet radio protocols and communications satellite design." The report goes on to say that ham radio "continues to play an important role in disaster-relief communications, where amateurs provide radiocommunications independent of the telephone network or other radio services."

To view the complete report, set your Web browser to
<http://www.ntia.doc.gov/osmhome/reports/hfspo/contents.html>.

Boy Scouts of America	Amateur Radio - N5ZGT
Eagle Scout (12-6-96)	ARRL QRP: NorCal# 1700 QRP-L# 580
JASM - Troop 41	Author of Worldradio's "Youth Forum" Column
Albuquerque, N.M.	Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
O.A. Lodge 66 <-W-W-W-<<	Internet: n5zgt@swcp.com
